



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/659,643	09/12/2000	James J. Gibbons Jr.	AM100081	6975

25291 7590 11/26/2004

WYETH
PATENT LAW GROUP
5 GIRALDA FARMS
MADISON, NJ 07940

EXAMINER

JONES, DWAYNE C

ART UNIT PAPER NUMBER

1614

DATE MAILED: 11/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/659,643

Applicant(s)

GIBBONS JR. ET AL.

Examiner

Dwayne C Jones

Art Unit

1614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31AUG2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/31/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Status of Claims

1. Claims 1 and 3-14 are pending.
2. Claims 1 and 3-7 are elected and rejected.
3. Claim 4 and 8-14 were cancelled as per the amendment of August 31, 2004.

Response to Arguments

4. Applicants' arguments filed December 31, 2003 have been fully considered but they are not persuasive. Applicants argue the following points of issue. First, applicants argue that the prior art reference of Stein et al. does not adequately reflect the state of the art for the filing date of this application. Second, applicants believe that one skilled in the art would not have doubted the ability to choose any compound of formula I with any chemotherapeutic agent to treat any solid tumor with the presence of the sole example of the cytokine inducer compound of formula I of [R-(R*,R*)]-N-[(R)-6-carboxy-N2-[[2-carboxy-1-methyl-2-[(1-oxoheptyl)amino]-ethoxy]carbonyl]-L-lysyl]-alanine or a pharmaceutically acceptable salt thereof and only for the treatment of nonsmall cell type lung tumors and only with the coadministration with paclitaxel. Third, applicant additionally submits the instant claims are not broad. Fourth, applicants submit that Ayral-Kaloustian et al. is not relevant to the instantly claimed subject matter because the all of the test examples of Ayral-Kaloustian et al. are given to a patient after 24 hours have elapsed from the administration of chemotherapy. Fifth, applicants argue that Ayral-Kaloustian et al. does not teach the compounds of formula I are useful to treat

tumors. Sixty, applicants further allege that hindsight was used to arrive at the rejection of the instant claims.

5. First, applicants argue that the prior art reference of Stein et al. does not adequately reflect the state of the art for the filing date of this application. However, Stein et al. clearly teach in 1994 that cancer treatment is highly unpredictable. In fact, even today in 2004 cancer is still illusive and the related treatments cannot predict the outcome of a patient undergoing chemotherapy. Accordingly, Stein et al. does show to the artisan that the treatment of cancer is unpredictable.

6. Second, applicants believe that one skilled in the art would not have doubted the ability to choose any compound of formula I with any chemotherapeutic agent to treat any solid tumor with the presence of the sole example of the cytokine inducers compound of formula I of $[R-(R^*,R^*)]-N-[(R)-6\text{-carboxy-N}^2-[[2\text{-carboxy-1-methyl-2-}[(1\text{-oxoheptyl)amino]}\text{-ethoxy}]\text{carbonyl}]\text{-L-lysyl}]\text{-alanine}$ or a pharmaceutically acceptable salt thereof and only for the treatment of nonsmall cell type lung tumors and only with the coadministration with paclitaxel. However, this single example in the entire specification does not provide enablement for all compounds of formula I nor does it provide guidance to treat any other cancer or tumor cell nor does the instant specification provide ample direction and teachings to utilize any other chemotherapeutic agent other than paclitaxel along with the sole exemplified cytokine inducer compound of formula I of $[R-(R^*,R^*)]-N-[(R)-6\text{-carboxy-N}^2-[[2\text{-carboxy-1-methyl-2-}[(1\text{-oxoheptyl)amino]}\text{-ethoxy}]\text{carbonyl}]\text{-L-lysyl}]\text{-alanine}$ or a pharmaceutically acceptable salt thereof.

7. Third, applicant additionally submits the instant claims are not broad. The instantly claimed subject matter is too broad for the amount of coverage that contained or rather that actually supports these large broad claims. The sole example in the entire specification does not provide enablement for all compounds of formula I nor does it provide guidance to treat any other cancer or tumor nor does the instant specification provide ample directed and teachings to utilize any other chemotherapeutic agent other than paclitaxel.

8. Fourth, applicants submit that Ayral-Kaloustian et al. is not relevant to the instantly claimed subject matter because the all of the test examples of Ayral-Kaloustian et al. are given to a patient after 24 hours have elapsed from the administration of chemotherapy. Ayral-Kaloustian et al. of U.S. Patent No. 5,545,662 that compounds of formula I can be used as anticancer agents themselves or even that the possess any anticancer properties to suggest combining them with other anticancer agents for purposes of treating solid tumors. In addition, Ayral-Kaloustian et al. do teach that the cytokine inducers compound of formula I are used to treat cancer, (see abstract and column 19, lines 26-27). For this reason, the instantly claimed subject matter is rendered obvious in view of example 28 of Ayral-Kaloustian et al.

9. Fifth, applicants argue that Ayral-Kaloustian et al. do not teach the compounds of formula I are useful to treat tumors. Ayral-Kaloustian et al. disclose of the administration of urea and urethane compounds of formula I for the treatment of cancer, (see abstract). Ayral-Kaloustian et al. specifically teach the compounds of formula I posses the ability to induce cytokine formation. These teachings could not be more

Art Unit: 1614

clear, and provide blatant motivation, to the skilled artisan to utilize the cytokine inducers compounds of formula I to treat cancer, which inherently includes tumors, namely solid tumors.

10. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). As a result, the skilled artisan would have been motivated to combine a known chemotherapeutic agent, namely paclitaxel, with the cytokine inducers compound of formula I to treat cancer, (see abstract and column 19, lines 26-27 as well as the repeated example of the cytokine inducers of formula, namely Compound No. 28. In addition, it is well known in the oncology art to use multiple agents having different modalities of action as part of a chemotherapy "cocktail."

Information Disclosure Statement

11. The information disclosure statement of August 31, 2004 has been reviewed and considered, see enclosed copy of PTO FORM 1449.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

13. The rejection of claims 1, 3, and 5-7 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the cytokine inducers compound of formula I of $[R-(R^*, R^*)]-N-[(R)-6\text{-carboxy-N}^2-[[2\text{-carboxy-1-methyl-2-}[(1\text{-oxoheptyl)amino]}\text{-ethoxy}]\text{carbonyl}]\text{-L-lysyl}]\text{-alanine}$ or a pharmaceutically acceptable salt thereof and only for the treatment of nonsmall cell type lung tumors and only with the coadministration with paclitaxel, does not reasonably provide enablement for using other cytokine inducers compounds and for the treatment of other types of tumors. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

The factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. 112, first paragraph, have been described in In re Wands, 8 USPQ2d 1400 (Fed. Cir. 1988). Among these factors are: (1) the nature of the invention; (2) the state of the prior art; (3) the relative skill of those in the art; (4) the predictability or unpredictability of the art; (5) the breadth of the claims; (6) the amount of direction or guidance presented; (7) the presence or absence of working examples; and (8) the quantity of experimentation necessary. When the above factors are

Art Unit: 1614

weighed, it is the examiner's position that one skilled in the art could not practice the invention without undue experimentation.

(1) The nature of the invention:

The instant invention is directed to the cytokine inducers compound of formula I of [R-(R*,R*)]-N-[(R)-6-carboxy-N2-[[2-carboxy-1-methyl-2-[(1-oxoheptyl)amino]-ethoxy]carbonyl]-L-lysyl]-alanine or a pharmaceutically acceptable salt thereof and only for the treatment of nonsmall cell type lung tumors and only with the coadministration with paclitaxel.

(2) The state of the prior art

The compounds of the inventions are the cytokine inducers compound of formula I of [R-(R*,R*)]-N-[(R)-6-carboxy-N2-[[2-carboxy-1-methyl-2-[(1-oxoheptyl)amino]-ethoxy]carbonyl]-L-lysyl]-alanine or a pharmaceutically acceptable salt thereof and only for the treatment of nonsmall cell type lung tumors and only with the coadministration with paclitaxel. However, the prior art does not teach that these tumors and cancer are highly unpredictable and consequently their treatment is also highly unpredictable to the artisan, see Stein, J. H.

(3) The relative skill of those in the art

The relative skill of those in the art of cancer pharmaceuticals is very high.

(4) The predictability or unpredictability of the art

The unpredictability of the pharmaceutical art is very high. In fact, the courts have made a distinction between mechanical elements functioning the same in different circumstances, yielding predictable results, but chemical and biological compounds often react unpredictably under different circumstances. Nationwide Chem. Corp. v. Wright, 458 F. Supp. 828, 839, 192 USPQ 95, 105(M.D. Fla. 1976); Aff'd 584 F.2d 714, 200 USPQ 257 (5th Cir. 1978); In re Fischer, 427 F.2d 833, 839, 166 USPQ 10, 24 (CCPA 1970). Thus, the physiological activity of a chemical or biological compound is considered to be an unpredictable art. For example, in Ex Parte Sudilovsky, the Court held that Appellant's invention directed to a method for preventing or treating a disease known as tardive dyskinesia using an angiotensin converting enzyme inhibitor involved unpredictable art because it concerned the pharmaceutical activity of the compound. 21 USPQ2d 1702, 1704-5 (BDAI 1991); In re Fisher, 427 F.2d 1557, 1562, 29 USPQ, 22 (holding that the physiological activity of compositions of adrenocorticotrophic hormones was unpredictable art; In re Wright, 999 F.2d 1557, 1562, 29 USPQ d, 1570, 1513-14 (Fed. Cir. 1993) (holding that the physiological activity of RNA viruses was unpredictable art); Ex Parte Hitzeman, 9 USPQ2d 1821, 1823 (BDAI 1987); Ex Parte Singh, 17 USPQ2d 1714, 1715, 1716 (BPAI 1990). Likewise, the physiological or pharmaceutical activity of the cytokine inducers compound of formula I of [R-(R*,R*)]-N-[(R)-6-carboxy-N2-[[2-carboxy-1-methyl-2-[(1-oxoheptyl)amino]-ethoxy]carbonyl]-L-lysyl]-alanine or a pharmaceutically acceptable salt thereof and only for the treatment of

nonsmall cell type lung tumors and only with the coadministration with paclitaxel an unpredictable art.

(5) The breadth of the claims

The instant claims are very broad. For instance, claim 1 is directed to the plethora of compounds embraced by the formula I and the treatment of any solid tumor and that all compounds of formula I are effective with the coadministration of any chemotherapeutic agent. The breadth of claims was a factor in Amgen v. Chugai Pharm. Co., 927 F.2d 1200, 18 USPQ2d (Fed. Cir.), cert. Denied, 502 U.S. 856 (1991). In the Amgen case, the patent claims were directed to DNA sequences that encoded amino acid sequences. Because a very small change in the amino acid sequence of a protein can result in a very large change in the structure-function activity of a protein and because the laws of protein folding are in such a primitive state, predicting protein structure (and hence, activity) while knowing only the sequence of the protein is akin to predicting the weather for a date in the future.

(6) The amount of direction or guidance presented

The amount of guidance or direction needed to enable the invention is inversely related to the degree of predictability in the art. In re Fisher, 839, 166 USPQ 24. Thus, although a single embodiment may provide broad enablement in cases involving predictable factors, such as mechanical or electrical elements, in cases involving unpredictable factors, such as most chemical reactions and physiological activity, more

Art Unit: 1614

teaching or guidance is required. In re Fischer, 427 F.2d 839, 166 USPQ 24; Ex Parte Hitzeman, 9 USPQ 2d 1823. For example, the Federal Circuit determined that, given the unpredictability of the physiological activity of RNA viruses, a specification requires more than a general description and a single embodiment to provide an enabling disclosure for a method of protecting an organism against RNA viruses. In re Wright, 999 F.2d 1562-63, 27 USPQ2d 1575. In the instant case, given the unpredictability of the physiological or pharmaceutical activity of all cytokine inducers of formula I and any chemotherapeutic agent to be effective in treating any and all tumors is insufficient for enablement. The specification provides no guidance, in the way of enablement for all cytokine inducers compounds of formula I other than the compound of for the cytokine inducers compound of formula I of [R-(R*,R*)]-N-[(R)-6-carboxy-N2-[[2-carboxy-1-methyl-2-[(1-oxoheptyl)amino]-ethoxy]carbonyl]-L-lysyl]-alanine or a pharmaceutically acceptable salt thereof, and only for the treatment of nonsmall cell type lung tumors and only with the coadministration with paclitaxel. In re Fisher, 427 F.2d 833, 166 USPQ 18 (CCPA 1970) (contrasting mechanical and electrical elements with chemical reactions and physiological activity). See also In re Wright, 999 F.2d 1557, 27 USPQ2d 1510 (Fed. Cir. 1993); In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). This is because it is not obvious from the disclosure of one species, what other species will work. In re Dreshfield, 110 F.2d 235, 45 USPQ 36 (CCPA 1940), gives this general rule: "It is well settled that in cases involving chemicals and chemical compounds, which differ radically in their properties it must appear in an applicant's specification either by the enumeration of a sufficient number of the members of a group or by other

Art Unit: 1614

appropriate language, that the chemicals or chemical combinations included in the claims are capable of accomplishing the desired result." The article "Broader than the Disclosure in Chemical Cases," 31 J.P.O.S. 5, by Samuel S. Levin covers this subject in detail. A disclosure should contain representative examples, which provide reasonable assurance to one skilled in the art that the compounds that fall within the scope of a claim will possess the alleged activity. See In re Riat et al. (CCPA 1964) 327 F2d 685, 140 USPQ 471; In re Barr et al. (CCPA 1971) 444 F 2d 349, 151 USPQ 724.

(7) The presence or absence of working examples

As stated above, the specification discloses the coadministration of a cytokine inducers of formula I along with any chemotherapeutic agent and for the treatment of any tumor. However, the instant specification only has enablement for only one cytokine inducers compound of formula I, namely [R-(R*,R*)]-N-[(R)-6-carboxy-N2-[[2-carboxy-1-methyl-2-[(1-oxoheptyl)amino]-ethoxy]carbonyl]-L-lysyl]-alanine or a pharmaceutically acceptable salt thereof, and only for the treatment of nonsmall cell type lung tumors and only with the coadministration with paclitaxel, see page 6 of the instant specification.

(8) The quantity of experimentation necessary

The quantity of experimentation needed to be performed by one skilled in the art is yet another factor involved in determining whether "undue experimentation" is required to make and use the instant invention. "The test is not merely quantitative,

Art Unit: 1614

since a considerable amount of experimentation is permissible, if it is merely routine, or if the specification in question provides a reasonable amount of guidance with respect to the direction in which the experimentation should proceed.” In re Wands, 858 F.2d 737, 8 USPQ2d 1404 (citing In re Angstadt, 537 F.2d 489, 502-04, 190 USPQ 214, 218 (CCPA 1976)). For these reasons, one of ordinary skill in the art would be burdened with undue "painstaking experimentation study" to determine all of the compounds that are embraced by the cytokines of formula I and additionally for the treatment of all tumors with the coadministration of any chemotherapeutic agent that would be enabled in this specification.

Claim Rejections - 35 USC § 103

14. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. The rejection of claims 1, 3, and 5-7 under 35 U.S.C. 103(a) as being unpatentable over Ayral-Kaloustian et al. of U.S. Patent No. 5,545,662 in view of The Merck Index is maintained and repeated for both the above-stated and reasons of record. Ayral-Kaloustian et al. teach the urea and urethane compounds of Formula I, namely the compound No. 28, that is useful in the treatment of cancer, (see abstract). In addition, Ayral-Kaloustian et al. teach that these compounds are useful for their ability to induce cytokine formation and restore bone marrow after chemotherapy, (see column 17, lines 8-10). Ayral-Kaloustian et al. further teach the compound No. 28 is useful in the treatment of cancer, (see column 19, lines 18-31). Moreover, the skilled artisan would have been motivated to especially use the cytokine inducers compound of formula I to treat cancer, (see abstract and column 19, lines 26-27 as well as the repeated example of the cytokine inducer of formula I, namely Compound No. 28) since this compound No. 28 appears repeatedly in many examples in Ayral-Kaloustian et al.

17. The Merck Index teaches of the following known anticancer agents: bleomycins, cisplatin, mitomycins, vinblastine, vincristine, (see pages 183, 329, 890-891, and 427-1428, respectively). The skilled artisan would have been motivated to select any known anticancer agent, such as paclitaxel, to treat cancer especially to obviate multi-drug resistance as well as decrease the toxicity level of a chemotherapeutic agent. Moreover, "[I]t is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. . . . [T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re*

Art Unit: 1614

Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). Accordingly, the skilled artisan would have been motivated to combine two pharmaceuticals, which are known to treat the very same ailment, namely cancer, together. In addition, it is well known in the oncology art to use multiple agents having different modalities of action as part of a chemotherapy "cocktail."

18. The rejection of claims 1, 3, and 5-7 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 5,545,662 in view of The Merck Index is maintained and repeated for both the above-stated and reasons of record.

19. The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned

Art Unit: 1614

by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2). As cited above in paragraphs 16 and 17.

Obviousness-type Double Patenting

20. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

21. The rejection of claims 1, 3, and 5-7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Patent No. 5,545,662 in view of The Merck Index is maintained and repeated for both the above-stated and reasons of record. Although the conflicting claims are not identical, they are not patentably distinct from each other because U.S. Patent No. 5,545,662 teaches the urea and urethane compounds of Formula I are useful in the treatment of cancer, (see abstract). In addition, U.S. Patent No. 5,545,662 teaches that these compounds are useful for their ability to induce cytokine formation and restore bone marrow after chemotherapy, (see column 17, lines 8-10). U.S. Patent No. 5,545,662 further teaches the compound No. 28 is useful in the treatment of cancer,

Art Unit: 1614

(see column 19, lines 18-31). Moreover, the skilled artisan would have been motivated to especially use the cytokine inducers compound of formula I to treat cancer, (see abstract and column 19, lines 26-27 as well as the repeated example cytokine inducers of formula, namely Compound No. 28) since this compound No. 28 appears repeatedly in many examples in U.S. Patent No. 5,545,662. The Merck Index teaches of the following known anticancer agents: bleomycins, cisplatin, mitomycins, vinblastine, vincristine, (see pages 183, 329, 890-891, and 1427-1428, respectively). The skilled artisan would have been motivated to select any known anticancer agent, such as paclitaxel, to treat cancer especially to obviate multi-drug resistance as well as decrease the toxicity level of a chemotherapeutic agent. Moreover, "[I]t is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. . . . [T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). In addition, it is well known in the oncology art to use multiple agents having different modalities of action as part of a chemotherapy "cocktail." Accordingly, the skilled artisan would have been motivated to combine two pharmaceuticals, which are known to treat the very same ailment, namely cancer, together.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. C. Jones whose telephone number is (571) 272-

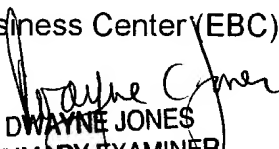
Art Unit: 1614

0578. The examiner can normally be reached on Mondays, Tuesdays, Thursday, and Fridays from 8:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low, may be reached at (571) 272-0951. The official fax No. for correspondence is (703) 872-9306.

Also, please note that U.S. patents and U.S. patent application publications are no longer supplied with Office actions. Accordingly, the cited U.S. patents and patent application publications are available for download via the Office's PAIR, see <http://pair-direct.uspto.gov>. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications may be obtained from Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 1-866-217-9197 (toll free).


DWAYNE JONES
PRIMARY EXAMINER

Tech. Ctr. 1614
November 19, 2004